



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

No. XI.

Observations made on a Lunar Eclipse at the Observatory in the City of Philadelphia on the 21st, of September 1801, by Mess. Patterson, and Ellicott.

Read Dec. 18th, 1801.

The beginning of the eclipse, that of total darkness, and the end of the eclipse, could not be observed on account of clouds; but the end of total darkness was observed as below.

End of total darkness as	}	h	'	"	apparent time		
observed by Mr. Patterson						15	15
☽'s limb began to emerge by	}	Mr. Ellicott	}	h	'	"	ap. time
☽'s limb emerged by							
				at 15	15	37	

The telescopes made use of were both achromatic, and magnified about 70 times.

No. XII.

On the Hybernation of Swallows, by the late Colonel Antes. Communicated by Dr. Barton.

Read May 17th, 1802,

Philadelphia July 9th, 1801.

ABOUT 30 years ago, I was desired by Mr. Stettler, who lived in Frederick Township, (at the time in Philadelphia county,) to lay off a level for the purpose of leading the water of a spring upon a meadow.—The exact year I do not recollect, but am positive it was in the month of February.—I began where the stream entered his ground, and before I had proceeded far I struck a hollow about a rod square which

was filled with wet mud and leaves. The labourers followed my level, and dug the trench. On getting into the hollow or pond, I observed that they threw up the body of a swallow. I took it up, muddy as it was, and having washed it in the water, I put it into my pocket. In a few hours I returned to the house of Mr. Stettler, took the swallow and placed it upon the wall of the stove, which was just warm. While we were taking some refreshments, we were surprised by the chirping of the bird, which soon afterwards was flying about the room, catching flies, and alighting from time to time upon the furniture. From the time of laying it on the stove, to the moment of its revival, was not more, I think, than about a quarter of an hour. Mr. Stettler kept the swallow in his house till the weather became warm, and the swallows began generally to appear: he then gave it its liberty.

The stream, which was the object of my business with Mr. Stettler, was dry during the summer; but after a heavy rain during the winter, and often during the summer, it flowed over into the hollow, carrying into it the leaves and mud which I found there, but did not flow through it. It had been a very mild winter;—the swallow was buried perhaps a foot, for the trench was no deeper; but it was certainly buried below the frost. I did not observe in that place any other swallows, the trench was narrow, and was carried near the edge of the pond. I have many times since that period, seen the swallows turned up out of the mud early in the spring; although the particulars of these instances, are not so clearly impressed upon my recollection. I have also often seen swallows, especially martins, creep under the roots of trees on the margin of creeks; I have then sought for them without success, and believe that they were retiring for the winter.

FREDERICK ANTES.